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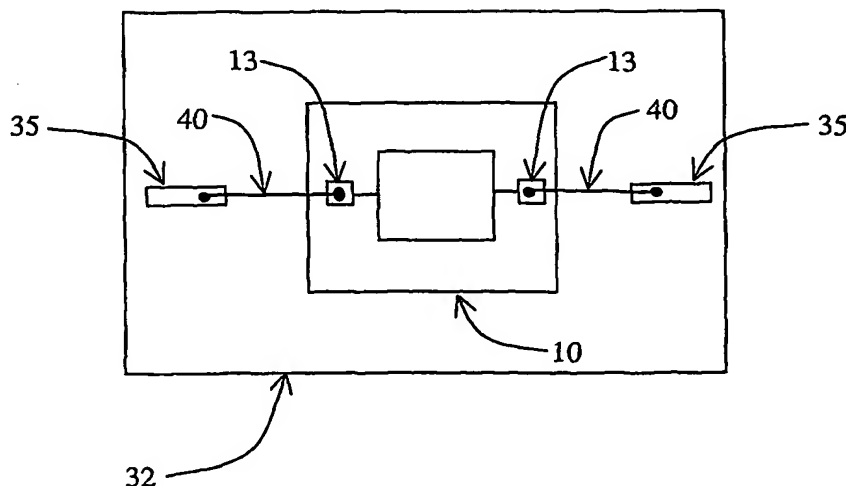
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(54) Title: INTERCONNECT APPARATUS AND METHODS



(57) Abstract: Disclosed are interconnect structures and methods which utilize a bonding surface comprising copper nitride. The interconnect structures include a bonding surface comprising copper nitride which is effective at preventing oxidation and/or other unwanted corrosion of the underlying conductive material while providing the basis for a high conductivity bond. The copper nitride bonding surface provides a relatively non-conductive, corrosion-resistant bonding surface while at the same time being readily transformed into a conductive layer at or just prior to the time of bonding.